

Serial No.: 10/678,693
Reply to Final Office Action of: March 21, 2006
Atty. Docket No.: JJK-0329 (P2002J099)

REMARKS

The Examiner will note that claims 1, 8 and 20 have been amended to specify that hydrotreating and hydrodewaxing occur in separate reactors as supported in paragraph 36 and Examples 1 and 2, column C.

Claim 15 has been amended to specify that dewaxing of raffinate feed takes place without prior hydrotreatment as supported on page 9, line 9.

Examiner's Response to Applicants' Arguments

The Examiner responded to Applicants' arguments dated January 6, 2006 that the argument that the Baker process does not operate in cascade with a cat dewaxer is not persuasive because the hydrotreating step of Baker can be operated by utilizing a hydrotreating catalyst (mono-functional catalyst) or a bifunctional catalyst (see col. 5, lines 62-65; col. 7, lines 57-65). Also, even if a mono-functional catalyst is used, the catalyst does not necessary to locate in the same reactor with the dewaxing catalyst. Furthermore, the modified process of the hydrotreating and the dewaxing of Baker are operated as the claimed process.

The argument that the dewaxing step of Baker utilized two catalyst systems whereas the present dewaxing step utilizing only one catalyst system is not persuasive. As discussed above the treating step and dewaxing step does not necessary to operate in the same reactor. Even if the two catalysts are located in the same reactor, there are still two zones in that reactor, which comprises a hydrotreating zone and a dewaxing zone. The dewaxing zone does not utilized hydrotreating catalyst and dewaxing catalyst, but the dewaxing step does.

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The argument that, in the process of Xiao, only liquid portion is passed into the dewaxing step is not persuasive. Xiao teaches that the effluent (which includes vapor and liquid) from the hydrotreating step is entirely passed into the dewaxing step. (See col. 9, lines 4-5)

The argument that, merely listing something as an option does not mean that the option is to be selected (e.g., passing the entire effluent from the hydrotreating to the dewaxing step) is not persuasive. Xiao teaches that the effluent from the hydrotreating zone can be either passed entirely to the dewaxing zone or passed only the liquid portion to the dewaxing zone. Therefore, one of skill in the art would operate the process in either fashions including passing the entire effluent from the hydrotreating to the dewaxing step.

The argument that Xiao does not teach the use of ZSM-48 in the dewaxing step is not persuasive. The examiner relied upon either Lucien or Cody to teach that ZSM-5 and/or ZSM-48 can be utilized in a dewaxing process.

The argument that Xiao does not teach the used of MCM-41 in the hydrofinishing zone is not persuasive. The examiner relied upon Kresge to teach the use of MCM-41 as a hydrotreating catalyst.

The argument that new amended claim 8 does not include the use of ZSM-48 and ZSM-5, but only ZSM-48 catalyst in the dewaxing zone is not persuasive. Claim 8 claims that the dewaxing zone consisting essentially of ZSM-8 catalyst (in line 10 of the claim) and also claims that the dewaxing zone further contains ZSM-5 (in lines 14-15).

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Applicants' Response to the Examiner's Comments

The Examiner cited Col 5, lines 62-65 and col. 7, lines 57-65 for teaching that Baker can be operated using a mono-functional or bi-functional hydrotreating catalyst.

First, as is clear from Col. 7, lines 57-67, hydrocracking and hydrotreating are not used as interchangeable terms. See, e.g., Col 7, lines 63-67 vs. Co. 7, lines 40-42 where hydrocracking boosts VI but hydrotreating alone will not. Col. 8, lines 1-16 teach that both catalysts and operating conditions are different for hydrotreating vs. hydrocracking.

Second, the hydrotreating taught by Baker in the passages cited by the Examiner is different from the synergistic catalyst system comprising a first high activity hydrotreating catalyst and a second selective dewaxing catalysts (col. 8, line 42 et seq). Col 9, lines 1-3 specifically notes that the hydrotreating step of the invention differs significantly from the hydrotreating used in conjunction with solvent extraction to boost VI (see col. 7, lines 63-67).

Thus the hydrotreating step from feed pretreatment is quite different from the hydrotreating step of the synergistic catalyst combination. Thus the Examiner's comment that the mono-functional catalyst in Baker does not necessarily have to be located in the same reactor as the dewaxing catalyst and the modified process of hydrotreating and hydrodewaxing of Baker are operated the same as applicants' claimed process does not apply to amended claim 1. As specified in amended claim 1, hydrotreating and hydrodewaxing take place in separate reactors and the "consisting essentially of" language for ZSM-48 precludes the presence of the high activity hydrotreating catalyst of Baker.

The Examiner's comments that even if the two catalysts are located in the same reactor, there are still two zones in that reactor which comprise a hydrotreating zone and

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a hydrodewaxing zone. Applicants' respond that pursuant to the amended claims, the same reactor cannot contain both a hydrodewaxing and a hydrotreating zone.

Thus even if Baker is combined with Kresge and either Benazzi or Carroll, applicants amended Claim 1 would not be taught or suggested by the cited combine references.

With regard to the Examiner's comments on Xiao, Xiao is cited in the rejection of claims 20-23 in combination with Kresge and with either Benazzi or Carroll. In Applicants' response filed on January 6, 2006, applicants noted that Xiao does not teach ZSM-48. In reply, the Examiner responded that Lucien or Cody are relied on to teach that ZSM-5 and/or ZSM-48 can be used in a dewaxing process. Clarification is respectfully requested since Lucien and Cody were cited in the rejection of claims 8-11. The rejection of claims 8-11 included the references as applied to claims 1-4 in further view of Lucien or Cody. It is not apparent that Lucien and Cody were combined with Xiao.

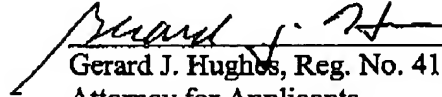
Finally, the Examiner noted that new claim 8 claims that the dewaxing zone consists essentially of ZSM-48 and also claims that the dewaxing zone further contains ZSM-5. In response, Baker is distinguished over amended claim 8 as noted above. Even if Baker is combined with Lucien or Cody, applicant's newly amended claim 8 is patentable over the cited art for the reasons noted above.

Based on the preceding arguments and amendments, the Examiner is requested to reconsider and withdraw all objections and rejections and pass this application to allowance. The Examiner is encouraged to contact applicants' attorney should the Examiner wish to discuss this application further.

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Respectfully submitted:

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